

**Zero Emission Vehicle Symposium
September 25-27, 2006**

Speaker Biographies

**Julie Beamer, Director of Fuel Cell Commercialization
General Motors**

Julie Beamer was named Director of Fuel Cell Commercialization for General Motors in 2003. In her new GM role, Beamer is responsible for the business planning development and deployment of GM 's rapidly developing fuel cell technology.

Beamer brings to her new position an extensive and diverse GM background in Business Planning, Finance, Marketing, Human Resources and overall business development. In her most recent position, Beamer was Director, Business Planning for GM North America Operations. In this role, she facilitated the GMNA Strategy Board and GMNA business planning activities and processes.

Julie started her career with GM in 1980 as a co-op student at GM's Central Foundry Division in Defiance, Ohio. By 1985, when she attained a Bachelor of Science degree in Industrial Administration from General Motors Institute, she was promoted to Production Supervisor and then was named Planning Manager at Central Foundry Division in 1987.

After attaining a Master's of Business Administration degree from The Wharton School at University of Pennsylvania in 1987, Beamer's career moved her through a rapid succession of planning, sales, marketing and business development experiences, including an assignment in Germany from 1995-1997.

**Dr. Edgar Berger, Hydrogen Powertrain Project Manager
BMW Group**

Dr. Edgar Berger studied physics, received his diploma in 1996 and finished his PhD in 1999 at the University of Heidelberg in Germany. He worked for two years in Paris at the "Université Paris Sud" and at the "Ecole Polytechnique" as postdoctoral research fellow.

After a short period in the research department of the French investment bank BNP Paribas he joined the BMW Group in April 2002. He worked first on energy management and heat storage systems. Since 2004, he is the Hydrogen powertrain advance development project manager of the BMW Group.

Alec N. Brooks
AeroVironment

Alec Brooks has been involved with electrically-propelled vehicles for almost 20 years in the areas of technology, public policy, and as a driver. He led the development of the GM SunRaycer solar racing car in 1987, and later led the development of the GM Impact electric vehicle, the forerunner of the EV1. In the 1990's he led the AeroVironment participation in the GM/DOE hybrid vehicle program. Later at AC Propulsion, he spearheaded the development of concepts by which connected vehicles would supply grid ancillary service functions, and coined the term "V2G", short for vehicle-to-grid. At AeroVironment he is chief engineer for the Global Observer hydrogen-powered high altitude unmanned aircraft. Alec has a Bachelor of Science degree from the University of California, Berkeley, and Masters and Ph.D. degrees from Caltech, all in Civil Engineering.

Tobias C. Brunner
BMW Group

Tobias Brunner has worked for the BMW Group on concept development for hydrogen storage in Munich, Germany since 2004. Before this, Tobias worked as a research assistant at the Institute of Fluid Mechanics and Aerodynamics, at the University of Armed Forces in Neubiberg, Germany. Tobias is working on a Ph.D. in Engineering in Fluid / Gas Dynamics at Technical University in Munich, Germany. He earned a diploma of Engineering from Mechanical Engineering, Technical University in Munich in 1997 and a Diploma of Engineering, Mechanical Engineering, École Centrale in Paris, France in 1996. He has various publications and has given several presentations on liquid hydrogen storage systems (e.g. EHEC 2005 in Zaragoza, Spain / WHEC 2006, Lyon, France) and has several pending patents on cryogenic hydrogen storage systems.

Andrew Chu
A123Systems

Dr. Chu is the program manager for A123's passenger HEV effort. He has been involved in the development of A123Systems' high-power product since its inception and spent a year and a half in Asia, supporting A123's cell manufacturing operations. Prior to joining A123Systems, he was the Department Manager of the Energy Technologies Department at HRL (formerly Hughes Research Lab.) At HRL, he led projects on supercapacitors and high-power batteries for HEV applications. Dr. Chu received his PhD in Materials Science and Engineering from the University of Pennsylvania.

Tien Q. Duong**Office of FreedomCAR and Vehicle Technologies, U.S. Department of Energy**

Tien Duong is Vehicles Technologies Team Lead at the U.S. Department of Energy's (DOE's) FreedomCAR and Vehicle Technologies Program Office. He represents DOE at the Executive Committee of the United States Advanced Battery Consortium (USABC). Mr. Duong is an executive committee member of the International Energy Agency Implementing Agreement on Hybrid and Electric Vehicle Technologies and Programmes. Mr. Duong studied organic chemistry at the University of Saigon, Vietnam, between 1974 to 1979. Mr. Duong holds a B.S. degree in Electrical Engineering, and a M.S. Degree in Civil Engineering from Virginia Polytechnic Institute and State University.

Stuart Evans**Delta-Q Technologies Corp.**

At Delta-Q since 2002, currently Director of Sales. Stuart has 18 years of experience in high tech industry. The first 10 years were in the control electronics field, in positions ranging from Product Design to Manufacturing Management. The most recent 8 years have been in advanced electronic power conversion, primarily in Market Management and Sales roles to industrial, military, and automotive OEM accounts.

Stuart holds the designation of Applied Science Technologist, Diploma of Engineering Technology from the British Columbia Institute of Technology and was recently awarded the Diploma of Marketing & Sales Management at the University of British Columbia.

Bruce Falls, Director**ECD/Ovonic Applied Technology Center**

Mr. Falls joined ECD/Ovonics in 2006 as the Director of the ECD/Ovonic Applied Technology Center. Mr. Falls has 23 years of experience in automotive engineering mostly in powertrain development. He has concentrated on the areas of base engine development, electronic controls including software and calibration, emissions development, and alternative fuels applications. Prior to joining ECD/Ovonics, he was Director of the Advanced Vehicle Concept Center for Quantum Technologies which specialized in prototype and production alternate fuel vehicle programs and hydrogen refueling products to support demonstration fleets. In this position he was responsible for the engineering activities, resource allocation, facilities and equipment including an emissions laboratory and engine dynamometer test cells.

After graduating from the University of Texas (BSME '83), Mr. Falls began his career at Chevrolet Engineering working at the Technology Center located in

Warren, Mi. and at the Milford Proving Grounds. After four years as a development engineer he joined McLaren USA to work with prototype powertrains and racing applications.

**Thomas B. Gage, President and CEO
AC Propulsion, Inc.**

Mr. Gage joined AC Propulsion in 1995, directing strategy and market planning, business development, and communications. He also manages production of prototype vehicles. Before AC Propulsion, Mr. Gage was a member of the Global Automotive Practice at SRI International conducting projects on the future of automotive transportation, electric vehicle commercialization, intelligent transportation systems, and neighborhood vehicles and other automotive topics. From 1984 to 1992, he worked as a manager in the Product Planning and Regulatory Strategy Office of Chrysler Corporation. He holds a B.S. degree in Mechanical Engineering from Stanford University, and an M.B.A. from Carnegie Mellon University.

**Kevin Harris, Business Development & Sales Director, North America
Hydrogen Power Systems
Hydrogenics**

Located in Los Angeles, Kevin Harris works in the field of Business Development, Marketing, and Sales for Hydrogenics Corporation. Kevin is responsible for evaluating opportunities that accelerate the commercialization of fuel cell technology, with specific focus in bus applications. These opportunities include supplier partnerships, OEM and distribution partnering, market and channel development, and sourcing of government funding. He is actively involved in organizations that promote the use of hydrogen and fuel cells including the California Fuel Cell Partnership, the California Stationary Fuel Cell Collaborative, Weststart-Calstart, the National Hydrogen Association, and the US Fuel Cell Council.

Prior to being in the hydrogen field, Kevin worked at Cummins Engine Company as an Account Executive. Kevin holds a Bachelor of Applied Science in Mechanical Engineering from the University of Waterloo, and is an MBA graduate from the Richard Ivey School of Business at the University of Western Ontario.

**Tim Hastrup
Electric Auto Association**

Tim Hastrup earned a MSEE from UC Davis. He has over 25 years experience in the high tech industry first as an engineer, and later as a project manager in R&D. Now a founding member of a small start up company focused on products and services to help save water and energy. Mr. Hastrup is one of the first five

families in California to take delivery of a Honda EV Plus on May 15th, 1997. He would have preferred driving EV's ever since, and currently owns two Toyota RAV4EVs that are the family's primary vehicles.

David W. Hermance
Executive Engineer
Advanced Technology Vehicles
Toyota Technical Center
Toyota Motor Engineering & Manufacturing, North America, Inc.

David W. Hermance is Executive Engineer for Advanced Technology Vehicles at Toyota Technical Center (TTC), located in Gardena, California. TTC, Toyota's North American R&D center, is a division of Toyota Motor Engineering & Manufacturing, North America, Inc. (TEMA). Mr. Hermance is responsible for advanced technology vehicle communication for the North American market and advanced technology vehicle emission regulatory activities in California.

Mr. Hermance joined TTC in 1991 as Senior Manager in Engine Evaluation, with responsibility for evaluating North American passenger car engines. In 1992, Mr. Hermance was promoted to General Manager of the Powertrain Department in Gardena, where he was responsible for the development of engine and drivetrain calibrations for the North American market.

Prior to this, from 1985 to 1991, Mr. Hermance served as Department Head for Durability Test Development at General Motors. He joined that company in 1965, serving in a variety of roles in the Vehicle Emissions Laboratory from 1971-1985.

Mr. Hermance earned a Bachelor of Science degree in engineering from the General Motors Institute. He is a member of the Society of Automotive Engineers.

Mr. Hermance and his wife, Mary, have two grown children – a son and a daughter – and reside in Southern California. He is a pilot and enjoys aerobic competition. He also likes to travel.

Mahendra [Max] Kapadia
Vice President of ASG Renaissance Group
President of Kapstone Consultants

Mr. Max Kapadia is a business executive with global experience in executing complex, high-investment programs from concept to customer. He is Vice President of ASG Renaissance Group, an Automotive Consulting Group based in Farmington Hills, MI. He is also a President of Kapstone Consultants, a business development and engineering productivity firm in Bloomfield Hills, MI. Among other things, Kapstone develops emerging businesses such as biotech medical devices, hardware and software applications, and hybrid vehicle

applications through strategic business planning, program leadership, as well as M&A and joint venture opportunities.

He has over thirty years of global automotive experience in successfully delivering billion dollar complex vehicle programs from concept to customer. He specialized in efficient product development processes, lean design, six sigma methodology, testing, value engineering, start ups and successful turnarounds.

As a Chief Platform Engineer for major vehicle lines at Ford Motor Company, he successfully directed three large global cross functional teams of professionals over the last ten years to deliver high quality launches on time and under budget. As a Chief Engineer of worldwide proving grounds, he led teams of over 1000 test engineers and professionals in improving test efficiency and productivity while increasing business growth through resourceful collaborations. During his tenure at Ford, he has mentored numerous engineers, managers and executives as well as suppliers to achieve their potential.

He has turned around distressed programs in an outstanding manner, winning international awards. His leadership of a distressed minivan program in a Ford-Otosan joint venture program in Turkey was lauded by the Chairman of Ford of Europe as exemplary. The program achieved the much acclaimed International Van of the Year award from European journalists, and the van led its segment in sales and customer satisfaction in 17 countries in Europe.

Max has an MBA from Wayne State University and MS in Mechanical Engineering from University of Missouri at Rolla. He has had extensive quality, leadership, management and strategic marketing training at Duke University and University of Michigan in Ann Arbor. He has won awards for Excellence in Leadership from Ford – Otosan in Turkey and the Dr. Norgund Science Prize in India. At Ford USA he was recognized with the Presidential Business Leadership Award and the Henry Ford Technological Award

Willett Kempton University of Delaware

Willett Kempton's education combines electrical engineering, computer science, and cognitive anthropology. He has degrees from the University of Virginia and Texas-Austin and a Postdoctoral program at UC Berkeley. His career spans 35 years research experience, five books, and 60 peer-reviewed articles on topics including energy systems, conservation behavior, technology policy, and US public environmental beliefs and values. He originated the concepts of vehicle-to-grid (V2G): connecting electric vehicles for two-way power flow, with communication and controls to allow the electric grid operator to request time-sensitive power. Working with students, colleagues, and businesses, he has developed the concepts, equations, and market analysis for V2G in a series of publications and research. Dr. Kempton is currently Associate Professor at the

University of Delaware's College of Marine and Earth Studies (<http://www.ocean.udel.edu/cms/wkempton/>). His two current research, speaking, and publishing foci are V2G (see www.udel.edu/V2G) and offshore wind power (www.ocean.udel.edu/WindPower).

Tony Markel
National Renewable Energy Laboratory

Tony Markel is a Senior Engineer and has been working on systems analysis of advanced vehicles for the past 9 years at the National Renewable Energy Laboratory in Golden, Colorado. Tony is a member of the Vehicle Systems Analysis Team in the Center for Transportation Technologies and Systems at NREL and provides support to the DOE FreedomCAR and Vehicle Technologies Program. Tony earned his Bachelors degree in Mechanical Engineering from Oakland University in 1995 and recently earned a Masters degree in Mechanical Engineering from the University of Colorado.

Tony's expertise spans advanced vehicle technologies to include hybrid electric, fuel cell, and plug-in hybrid vehicles. He was instrumental in the development of the ADVISOR software tool for vehicle systems simulation and is skilled at using analysis and optimization tools to highlight potential solutions to real-world problems.

Tony participated in the original EPRI HEV impacts study and is currently leading a team of engineers at NREL to explore plug-in hybrid electric vehicle technology as an option for reducing our nation's petroleum consumption.

Matt Miyasato
South Coast AQMD

Dr. Matt Miyasato is the Technology Demonstration Manager for Science and Technology Advancement at the South Coast Air Quality Management District. In this role, Dr. Miyasato leads the group responsible for the Clean Fuels Program, which evaluates, funds, and monitors pre-commercial, clean, advanced technologies for both mobile and stationary sources.

Dr. Miyasato received his undergraduate degree in Mechanical Engineering, and his Masters and Ph.D. in Engineering, specializing in combustion technologies and air pollution control – all from the University of California, Irvine.

Dr. Miyasato has worked at Southern California Edison in the Nuclear Engineering Department and at General Electric, where he designed burners and combustion modifications for utility boilers. Dr. Miyasato was also a research scientist at UCI, where he managed the industrial burner research program and has publications on combustion phenomena, active control, and laser

diagnostics. Dr. Miyasato has also been a lecturer at UCI for the undergraduate air pollution control course.

In his current role at the AQMD, Dr. Miyasato leads the Clean Fuels Research, Development, Demonstration, and Deployment Program for advancing technologies related to fuel cells, hydrogen, alternative fueled engines, PM and NOx retrofits, hybrid vehicles, and other clean alternative technologies. The Clean Fuels Program awards projects totaling approximately \$10 to \$12 million per year, leveraging and building upon partnerships with industry and other government agencies.

The SCAQMD is the air pollution control agency for Orange County and major portions of Los Angeles, San Bernardino and Riverside counties.

Eugene Nishinaga
San Francisco Bay Area Rapid Transit District

Eugene Nishinaga is currently the Manager of the Bay Area Rapid Transit District's Research and Development Division. He has held this position since 1991 prior to which he managed major projects to upgrade BART's train control system. As manager of an R&D Division for a transit operation his areas of technical involvement have included advanced energy storage devices, high temperature superconducting cable applications, artificial intelligence based diagnostic systems, active noise cancellation, fare collection technologies, non-destructive testing, and advanced control systems.

Eugene is currently a founding member of the Coalition for a New California Infrastructure (CNCI) and works closely with the University of California Berkeley to promote technology research in the fields of transportation, energy, and telecommunication.

Prior to his position at BART, Eugene was employed at the Boeing Aerospace Company where he originally served as an electronic circuit design engineer for the Morgantown People Mover system and later as a lead design engineer for the FTA-sponsored Advanced Group Rapid Transit (AGRT) research and development program. Eugene is a graduate of the University of California Berkeley with a degree in electrical engineering and computer sciences.

Peter Nortman M.S., P.E
EnergyCS, President and Co-Founder

Mr. Nortman has over 20 years experience in development of vehicle systems, engineering design and battery traction system integration. In his present and in previous capacities, he has been responsible for leading edge concept development, battery system design and failure mode analysis, safety and protection systems, cost optimization and manufacturability, and electric or hybrid

electric vehicle traction system integration on over 40 system architectures. Mr Nortman's individual and varied experience in electrochemical energy storage system application, control and testing covers Lilon, LiPolymer, NiMH, PbAcid, NiZn, AgZn, ZnAir, fuel cells and electrolyzers. Mr. Nortman's present and past employers or clients include AeroVironment, GM, DOE, Chrysler, ECD, COBASYS, Arizona Public Service, SMUD, PG&E, SCE, Valence Technologies, Avestor, Railpower, GEM, U.S. Electricar, DEMI and others.

As leader and responsible manager of engineering efforts at EnergyCS, its programs on electric and hybrid electric vehicles ranging from the PHEV Prius, to conversion or custom built EVs, purpose built electric and hybrid buses and hybrid locomotives have been ground breaking and created paths for progress and product sales for many customers. Several systems designed and integrated by Mr. Nortman and his teams have reached limited volume production in 100's of units.

Joan Ogden
UC Davis

Dr. Joan Ogden is Professor of Environmental Science and Policy at the University of California, Davis and Co-Director of the Hydrogen Pathways Program at the campus's Institute of Transportation Studies. Her primary research interest is technical and economic assessment of new energy technologies, especially in the areas of alternative fuels, fuel cells, renewable energy and energy conservation. Her recent work centers on the use of hydrogen as an energy carrier, hydrogen infrastructure strategies, and applications of fuel cell technology in transportation and stationary power production. She headed the systems integration team for the USDOE National Hydrogen Roadmap in 2002. She is active in the H2A, a group of hydrogen analysts convened by the Department of Energy to develop a consistent framework for analyzing hydrogen systems. She served on the Blueprint Plan advisory panel for the California Hydrogen Highway Network in 2004-5. She holds BS in Mathematics from the University of Illinois, and a Ph.D. in theoretical physics from the University of Maryland. Prior to joining the faculty at UC Davis, Ogden was a research scientist at Princeton University's Center for Energy and Environmental Studies from 1985-2003.

Lawrence J. Oswald, Ph.D
Chief Executive Officer
Global Electric Motorcars, LLC
DaimlerChrysler Corporation

Dr. Oswald received all of his college degrees from the University of Michigan in Aerospace Engineering. He spent the first 26 years of his professional career at the General Motor Research and Development Center. There, he conducted, then later lead, R & D projects covering a wide range of topics from ground

vehicle aerodynamics, to noise and vibration control to electric and hybrid propulsion system development.

In February 1998, he joined the DaimlerChrysler Corporation. In October 2000 he was appointed to lead the newly-formed Hybrid and Electric Vehicle Product Team where his responsibilities were to move several of DaimlerChrysler's concept hybrid electric vehicles towards production-readiness. In December, 2000, when DCC purchased Global Electric Motorcars (GEM) from its founder, he was appointed the Chief Executive Officer of GEM, his current title. Under his leadership, GEM has expanded its product line-up and installed distribution networks in North America, Europe and Asia. GEM is recognized as the largest producer of street-legal electric vehicles in the world.

Danilo (Dan) Santini
Section Leader
Center for Transportation Research (CTR)
Energy Systems Division (ES)
Argonne National Laboratory (ANL)

Danilo (Dan) Santini obtained his Ph.D in Urban Systems Engineering and Policy Analysis from Northwestern University in 1976. He began working at Argonne National Laboratory in 1974. Dr. Santini was chair of the Chicago Chapter of the International Association of Energy Economists from 1985-86. From 1992-2004 Dr. Santini was section leader of the Technology Assessments Section within the Center for Transportation Research at Argonne National Laboratory, and now is leader of the Technology Analysis section. He served as chair of the Alternative Fuels Committee of the National Research Council's Transportation Research Board from 1996-2002. In 2003 he was awarded the title senior economist. Since May of 2001 he has been the Department of Energy's primary technical representative for the U.S. to the International Energy Agency Implementing Agreement on Hybrid and Electric Vehicles. In 2003 he became a member of the American Transportation Research Institute's Research Advisory Committee. Dr. Santini has authored, co-authored or edited 150 articles, reports, and conference papers.

Paul Scott
Lifelong environmental activist
Plug In America (PIA) co-founder

Paul advocates for the manufacture of Electric Vehicles and plug-in hybrids that reduce America's dependence on petroleum and improve the global environment. As one of the PIA's most visible leaders, he is regularly interviewed by media coast to coast and works with auto industry officials, consumers and local, state and federal policymakers to advance clean car technology.

Paul helped create Don'tCrush.com, PIA's predecessor, a grassroots group that

single-handedly prevented some 1,000 production EVs from being destroyed by the auto companies that manufactured them. His work with both groups has included strategic campaign research, planning and execution. He is among the key figures featured in "Who Killed the Electric Car?" the 2006 documentary distributed by Sony Pictures Classics.

Paul works professionally as Director of Business Development for Amalgamated Pixels, a visual effects company based in Westlake Village, CA., and is a sales representative for Energy Efficiency Solar, a solar energy company. He owns a Toyota RAV4 EV, which he drives on electricity generated by the photovoltaic panels on his own roof in Santa Monica. He is also Vice President of the Electric Vehicle Assn. of Southern California.

Chelsea Sexton
Executive Director, Plug In America

Chelsea Sexton is a Los Angeles area native who is quite literally driven by her passion. She entered the automotive industry at the age of 17 after buying her first Saturn, but found her first true home on the General Motors EV1 electric vehicle program. Focusing on building a market for alternate-fuel vehicles through partnerships with corporate and non-profit stakeholders, shaping public policy and incentives, developing marketing strategies, and working directly with the drivers themselves, Chelsea became well-known as an advocate for clean, efficient, fun transportation. Such advocacy became a family passion when Chelsea married Bob Sexton, an EV1 technician and had their son Christopher, who is now 7 years old and still designates the EV1 as the first car he remembers and the one he loves most.

When General Motors ended the EV1 program in 2001, Chelsea left the company and went on to make meaningful contributions in other areas. Still, cars, technology and the environment remains so much a part of her DNA that she continued to consult with auto manufacturers and clean energy providers regarding the needs and challenges of bringing alternate fuel vehicles to market, as well as increasingly clean ways to power them. In 2005, Chelsea joined the X-PRIZE Foundation and led the creation of its next prize effort, which will deal with both energy and automobiles. In her spare time, Chelsea has helped to organize several grassroots campaigns to stop the destruction of various electric vehicles, and is now the Executive Director of Plug In America, a coalition of individuals and organizations that advocates for the preservation and manufacture of electric vehicles and plug-in hybrids by assisting policymakers to create mandate and/or incentive plans, working with automakers to encourage production, and through consumer education. Their collective efforts are chronicled in the 2006 film, "Who Killed the Electric Car?" by Sony Pictures Classics.

Margaret Steinbugler
UTC Power

Margaret Steinbugler is the Manager of Transportation Fuel Cell Product Development at UTC Power with responsibility for the design of proton exchange membrane (PEM) fuel cell systems for all automotive and fleet vehicle projects. Formerly she worked as a research scientist at United Technologies Research Center in East Hartford, Connecticut, where she led the Center's automotive PEM fuel cell program for International Fuel Cells (now UTC Power) and was the UTRC program manager for IFC's automotive fuel cell development programs. She has been active in the PEM fuel cell field for 15 years working in the areas of fuel cell vehicle modeling and technology assessment as well as in experimental investigations of alternative PEM fuel cell designs. In 2003 she was inducted into the YWCA-NYC Academy of Women Achievers. She has published several papers in the areas of fuel cell systems and hydrogen studies and has six patents related to PEM technology. She holds degrees in chemical and mechanical & aerospace engineering from Princeton University. Her experience also includes several technical and managerial positions in paper manufacturing.

Sven Thesen
Clean Air Transportation Group Supervisor
PG&E

Sven Thesen has a degree in Chemical Engineering from North Carolina State University and over 15 years in industry as an environmental professional. His keen interest in electric transportation stems from the realization of their environmental and societal benefits:

- No ground level emissions;
- "Wheel to well" emission (criteria and carbon dioxide) footprint significantly smaller than that of combustion based engines;
- Electric energy becomes cleaner as time goes on; and
- Significant reduction in petroleum dependency.

Besides his lovely wife and two children, his only claim to fame and fortune is to be the first person to backpack both the Pacific Crest Trail and Appalachian Trail (~4,650 miles) in one calendar year.

Jasna Tomic, Ph.D.
WestStart-Calstart, Senior Consultant

Dr. Tomic is interested in sustainable energy use and greater dependence on alternative fuels and vehicles. Her recent work has focused on the innovative use of electric-drive vehicles for transportation and as sources of power. She is one of the principal investigators of Vehicles-to-Grid power (V2G) — use of electric-drive vehicles as distributed power generation sources.

She holds a Ph.D. in Fuel Science from Pennsylvania State University and has over 10 years experience working in science and engineering of energy and fuels. She held positions as Research Scientist at University of Delaware, Princeton University, and French Institute of Petroleum. She has published extensively on energy conversion processes as well as use of electric-drive vehicles. Dr. Tomic is currently a Senior Consultant to WestStart-CALSTART working on hybrid truck program.

Dr. Christopher White
Sandia National Laboratories

Dr. Christopher White is a Senior Member of the Technical Staff at Sandia National Laboratories in the Combustion Research Facility. His principal duties include lead investigator in the Advanced Hydrogen Fueled Engine Laboratory. His research interests include experimental fluid mechanics, combustion, and energy conversion technologies.

Dr. White earned a B.S. and M.S. in Mechanical Engineering at the State University of New York at Stony Brook and a Ph.D. in Mechanical Engineering at Yale University. From 2001–2004 he was a Postdoctoral Research Fellow at Stanford University in the Department of Mechanical Engineering.

Michael Walsh
ZEV Independent Expert Review Panel

As the first recipient of the U.S. Environmental Protection Agency Lifetime Individual Achievement Award, Michael Walsh demonstrated leadership, and a lasting commitment to promoting clean air. He is a mechanical engineer who has spent his entire career working on motor vehicle pollution control issues at the local, national and international level.

Keith Wipke
National Renewable Energy Laboratory

Mr. Wipke is a Senior Engineer II at the National Renewable Energy Laboratory, where he has worked in the area of advanced vehicles for over 13 years. The first decade of that time was spent researching hybrid electric vehicles through data collection, analysis, and computer modeling using NREL's advanced vehicle simulator ADVISOR. In 2003, ADVISOR was licensed to AVL for commercialization and Mr. Wipke moved to the hydrogen group at NREL to work on the Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project and lead the Hydrogen Technology Validation team. He received his masters degree in mechanical engineering from Stanford University.

**Ian Wright, CEO
WrightSpeed Inc.**

Mr. Wright became involved with EVs in 2003, spending 2004 as VP Vehicle Development at Tesla Motors, then founding Wrightspeed in January 2005. Prior to Tesla, he spent 20 years in the data communications industry, in roles such as EVP Engineering and CTO at Altamar Networks, building optical switching and transmission equipment.

Originally from New Zealand, Mr Wright moved to Silicon Valley in 1993 from Australia. While living in Australia, he was an amateur racing driver and racecar constructor